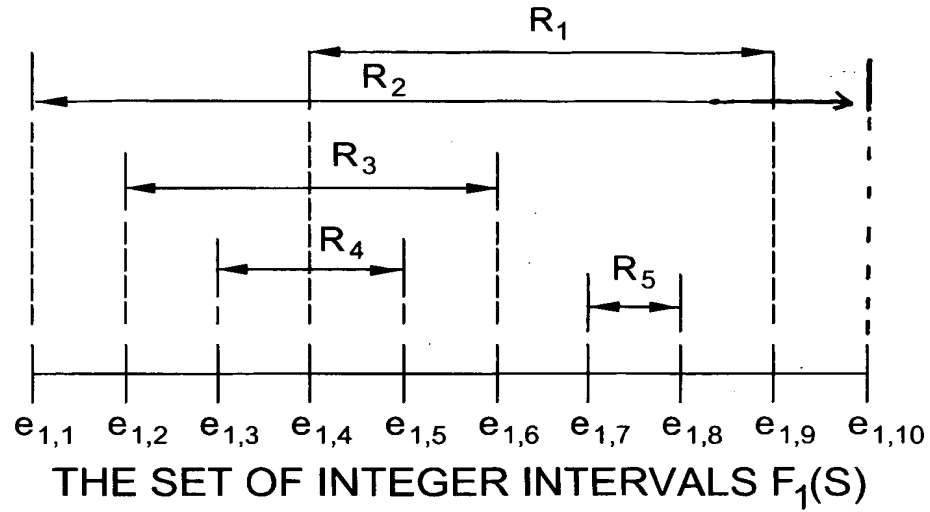


REPLACEMENT SHEET  
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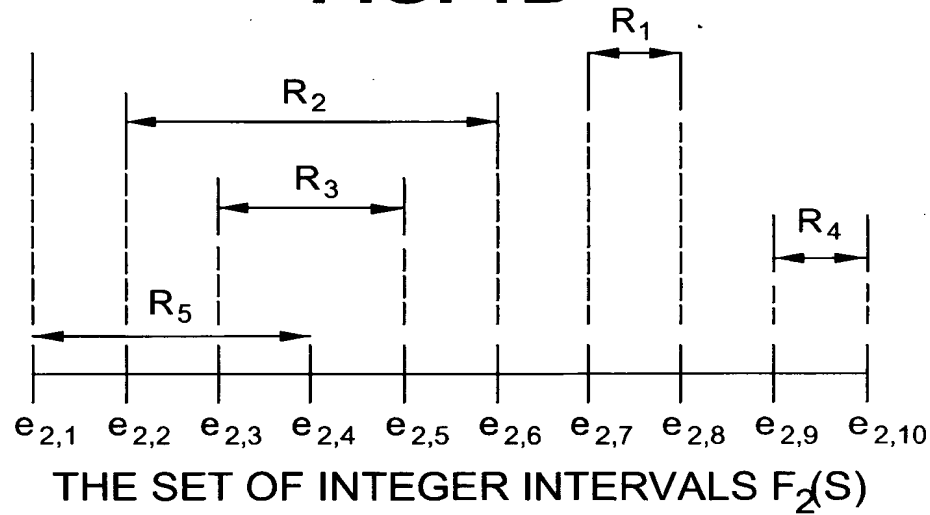


RULE	$F_1$	$F_2$	$F_3$
$R_1$	$[e_{1,4}, e_{1,9}]$	$[e_{2,7}, e_{2,8}]$	$[e_{3,1}, e_{3,1}]$
$R_2$	$[e_{1,1}, e_{1,10}]$	$[e_{2,2}, e_{2,6}]$	$[e_{3,2}, e_{3,6}]$
$R_3$	$[e_{1,2}, e_{1,6}]$	$[e_{2,3}, e_{2,5}]$	$[e_{3,7}, e_{3,9}]$
$R_4$	$[e_{1,3}, e_{1,5}]$	$[e_{2,9}, e_{2,10}]$	$[e_{3,4}, e_{3,5}]$
$R_5$	$[e_{1,7}, e_{1,8}]$	$[e_{2,1}, e_{2,4}]$	$[e_{3,3}, e_{3,8}]$

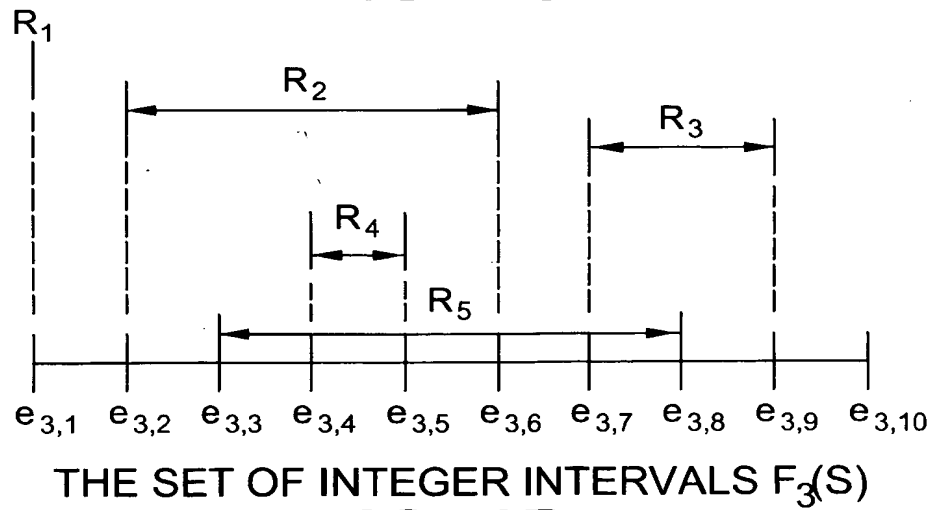
RULE SET S  
**FIG. 1A**



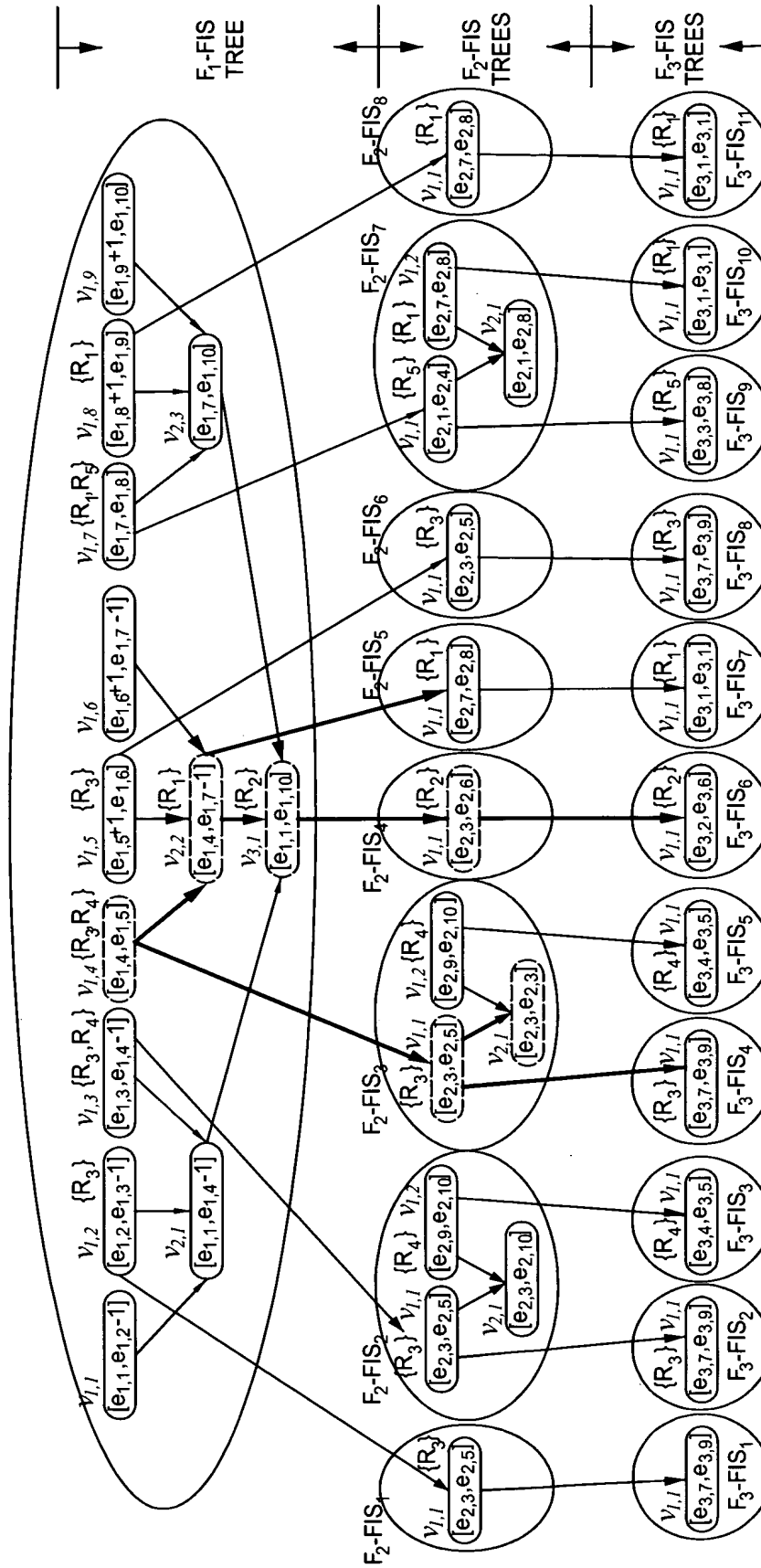
**FIG. 1B**



**FIG. 1C**



**FIG. 1D**



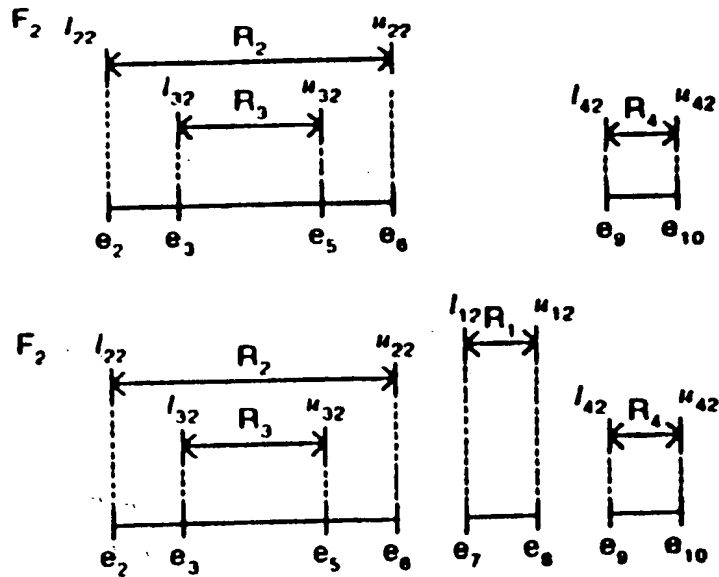
THE FIS TREES BUILT FOR THE RULE SET S AND THE  
SEARCHING PATHS FOR THE PACKET P

FIG. 2

REPLACEMENT SHEET  
APPLICATION NO. 10/648,791

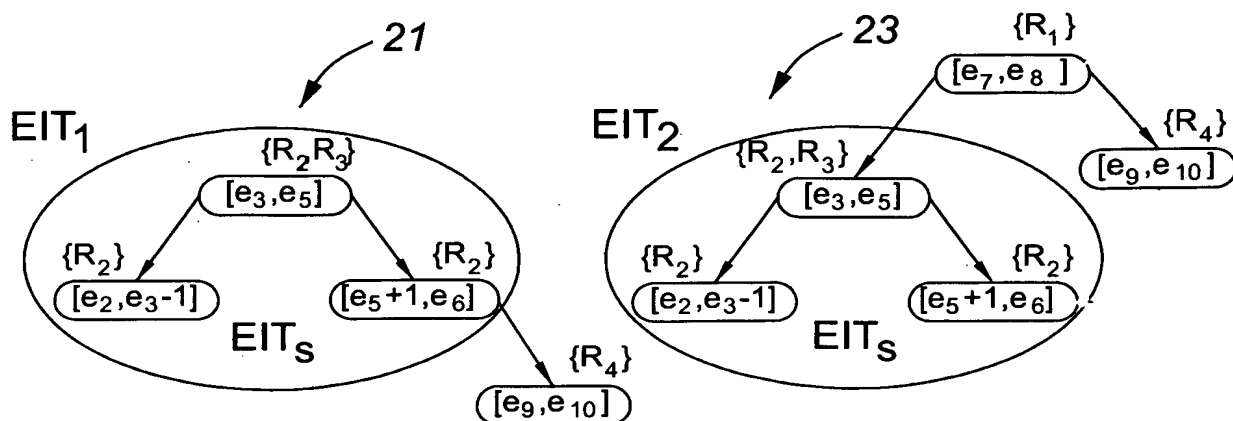
The rule table T

Rule	$F_1$	$F_2$	$F_3$
$R_1$	$[e_4, e_9]$	$[e_7, e_8]$	$[e_1, e_1]$
$R_2$	$[e_1, e_{10}]$	$[e_2, e_6]$	$[e_2, e_6]$
$R_3$	$[e_2, e_6]$	$[e_3, e_5]$	$[e_7, e_9]$
$R_4$	$[e_3, e_5]$	$[e_9, e_{10}]$	$[e_4, e_5]$
$R_5$	$[e_7, e_8]$	$[e_1, e_4]$	$[e_3, e_9]$



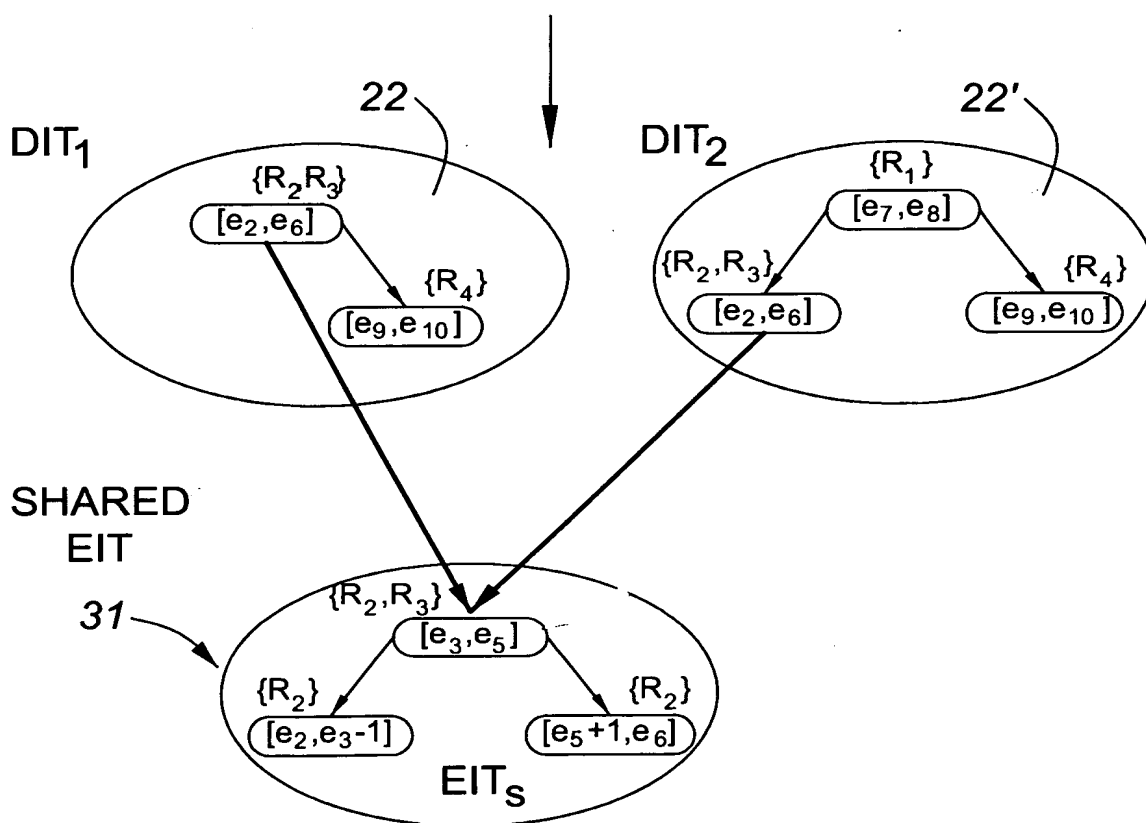
**DISJOINT INTERVALS  $F_2(S_1)$  AND  $F_2(S_2)$ ,  
 $S_1 = (R_2, R_3, R_4)$ ,  $S_2 = (R_1, R_2, R_3, R_4)$**

FIG. 3A



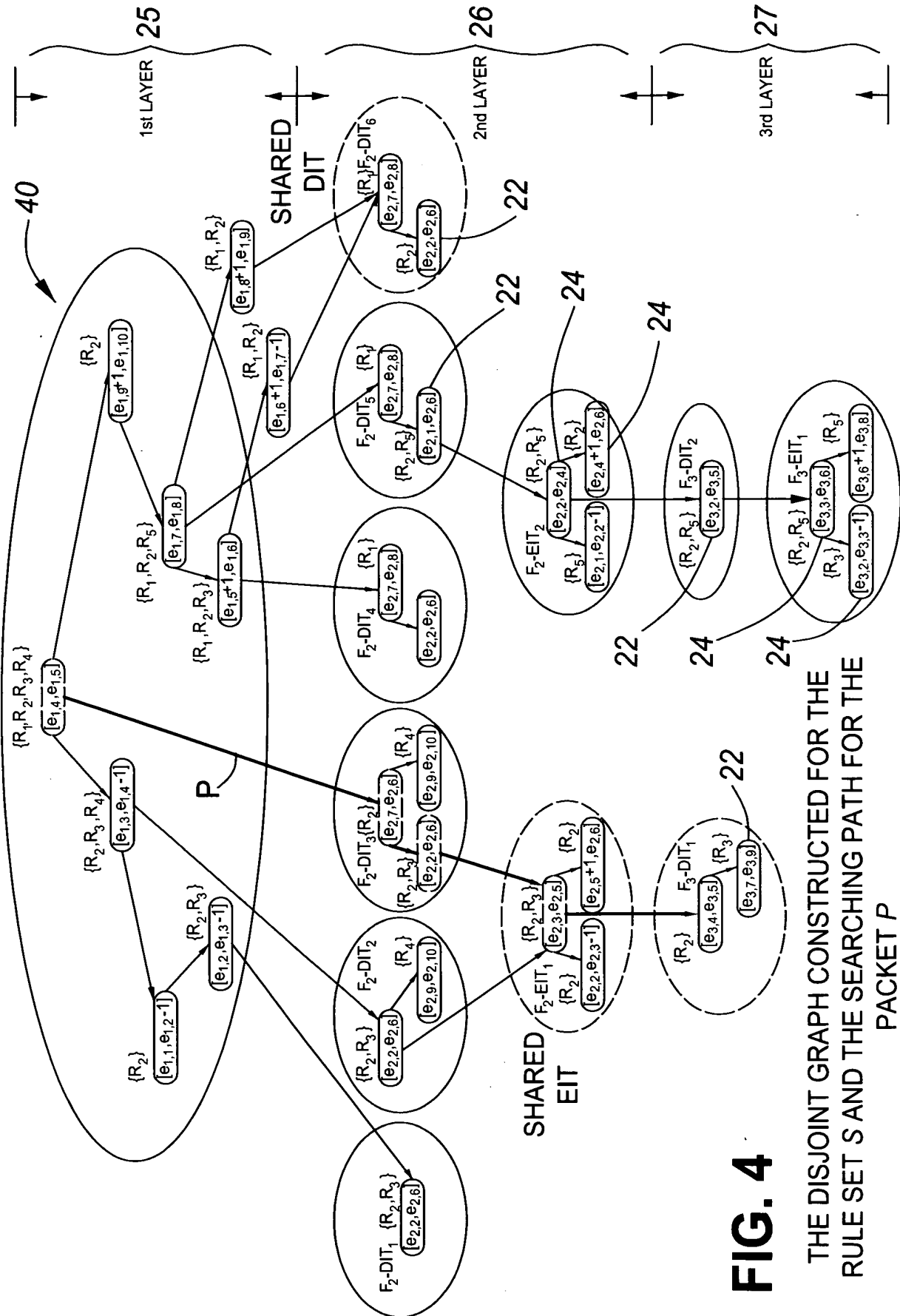
EITs CONSTRUCTED FOR  $F_2(S_1)$  AND  $F_2(S_2)$ ,  
 $S_1 = \{R_2, R_3, R_4\}$ ,  $S_2 = \{R_1, R_2, R_3, R_4\}$

**FIG. 3B**



DISJOINT GRAPH CONSTRUCTED FOR  
 $F_2(S_1)$  AND  $F_2(S_2)$ ,  $S_1 = \{R_2, R_3, R_4\}$ ,  $S_2 = \{R_1, R_2, R_3, R_4\}$

**FIG. 3C**



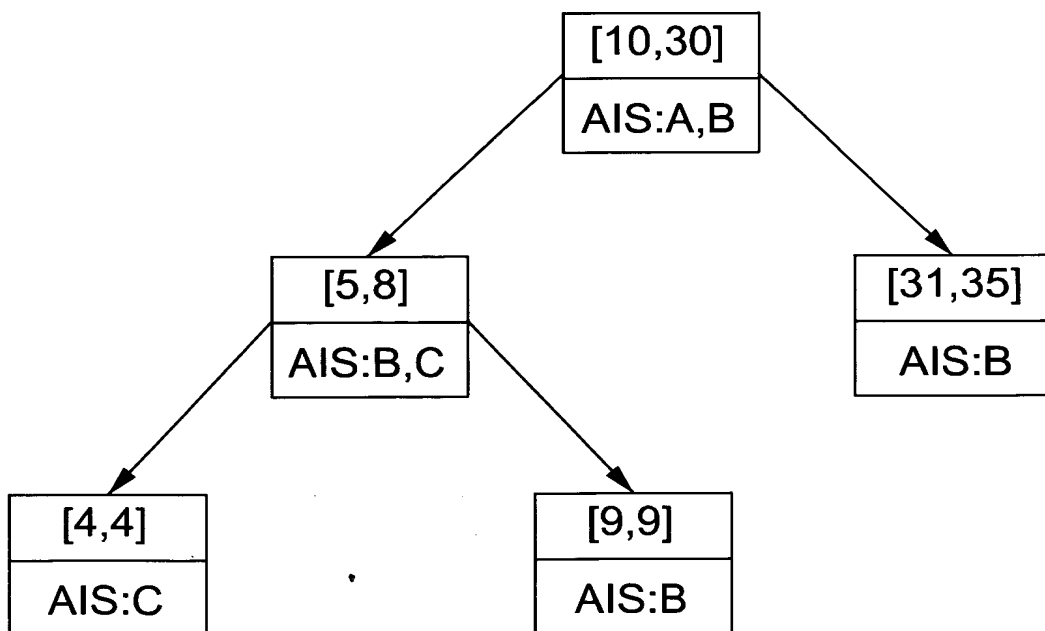
# FIG. 4

THE DISJOINT GRAPH CONSTRUCTED FOR THE  
RULE SET S AND THE SEARCHING PATH FOR THE  
PACKET P

IDENTIFIERS	A	B	C
INTERVALS	[10,30]	[5,35]	[4,8]

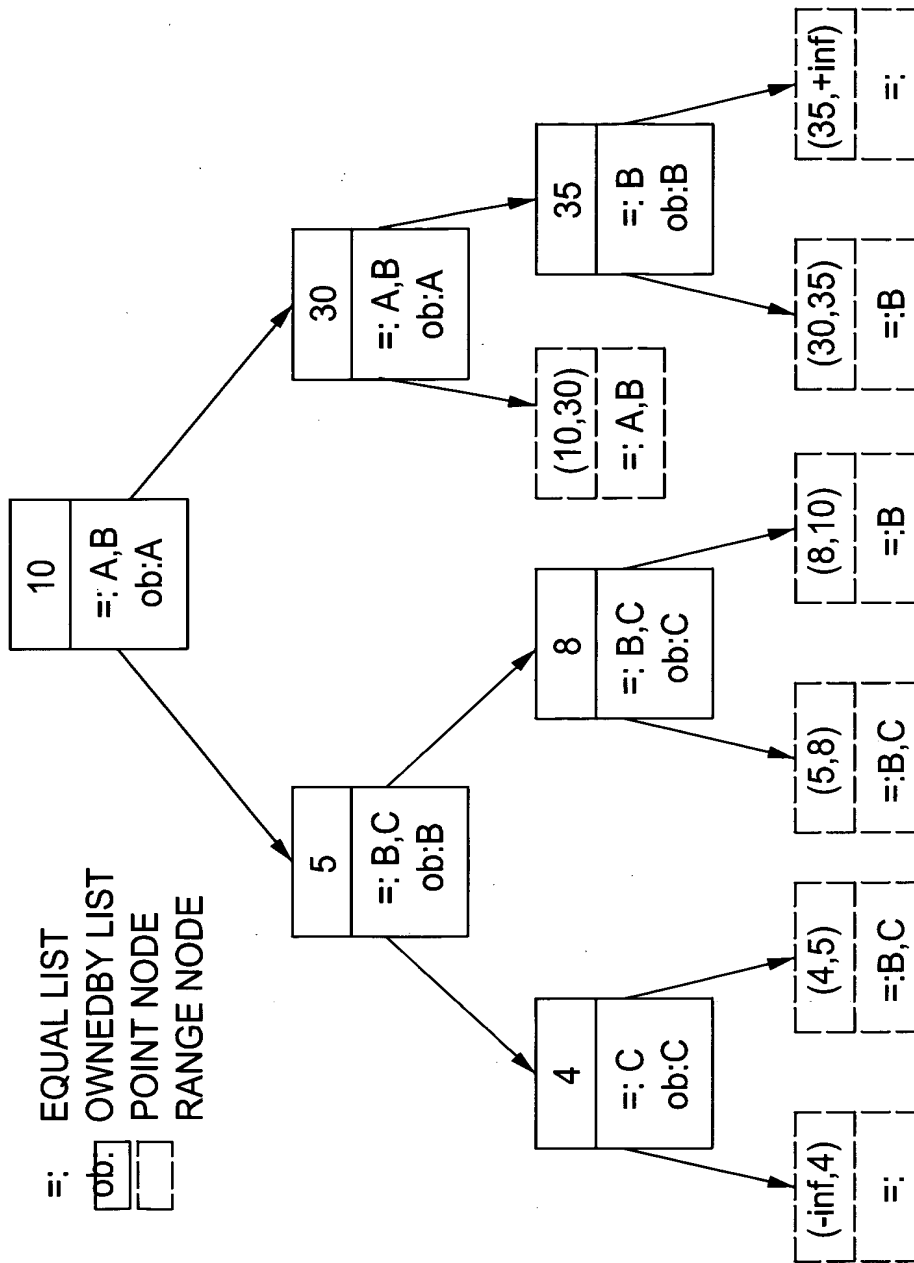
THE INTERVALS SET S WITH 3 INTERVALS

**FIG. 5**



THE ELEMENTARY INTERVAL TREE BUILT FOR S

**FIG. 7**



THE PR-TREE BUILT FOR S

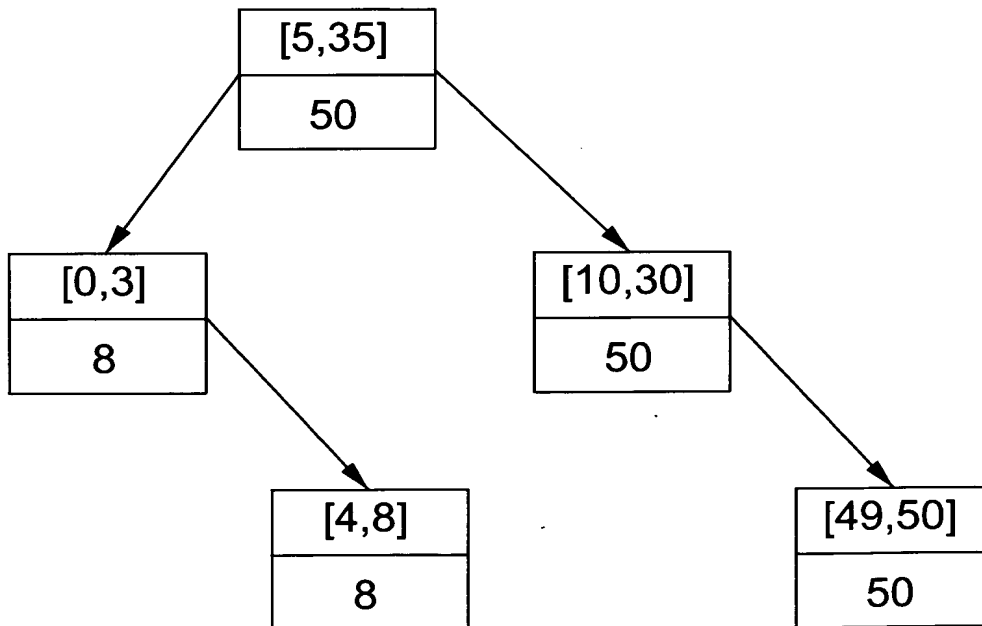
**FIG. 6**



IDENTIFIERS	A	B	C	D	E
INTERVALS	[10,30]	[5,35]	[0,3]	[4,8]	[49,50]

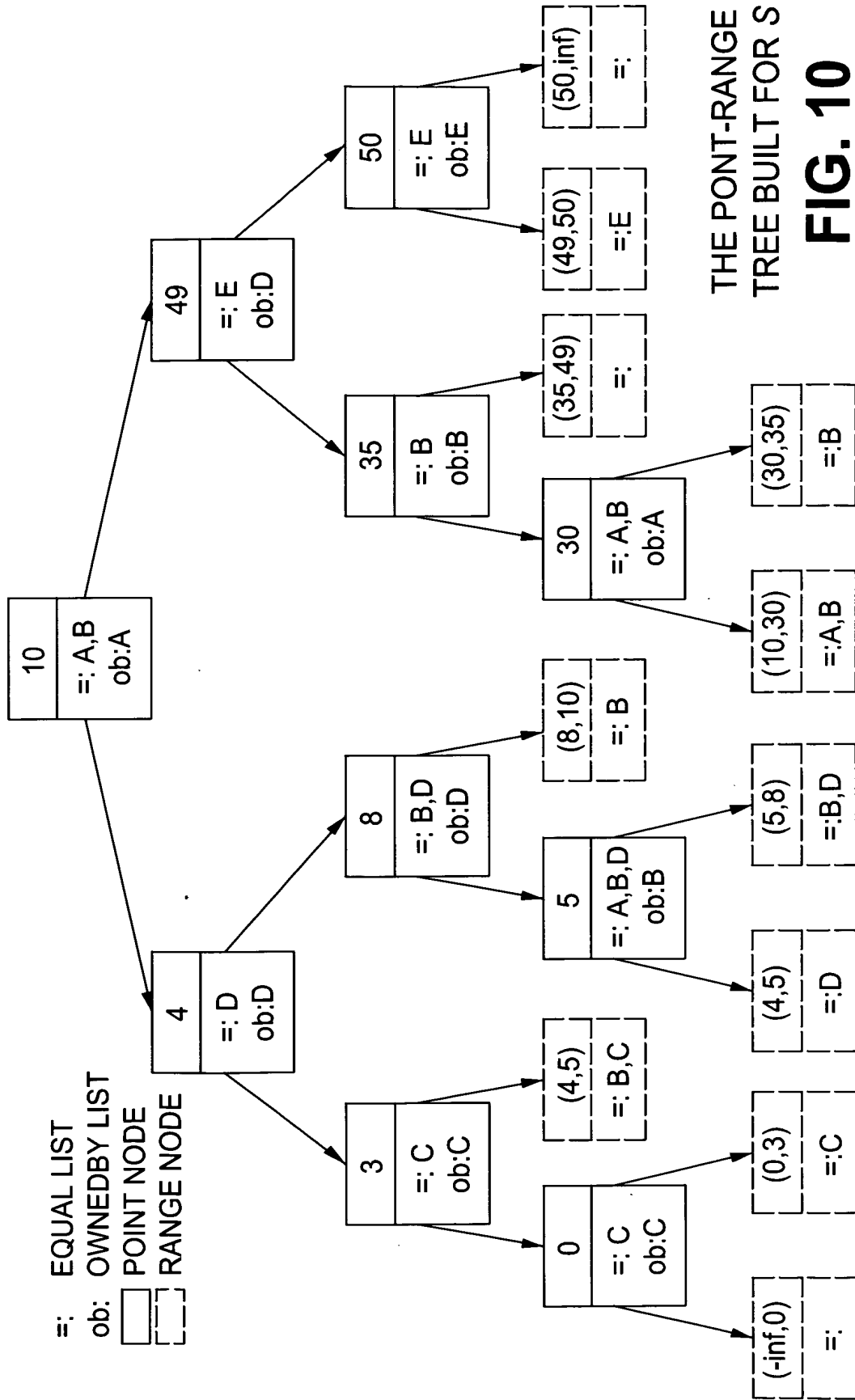
THE INTERVALS SET S WITH 5 INTERVALS

**FIG. 8**



THE INTERVAL TREE BUILT FOR S

**FIG. 9**



**REPLACEMENT SHEET**  
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INTERVALS	[0,4)	[4,5)	[5,10)	[10,49)	[49,MAX)
LABELS	000	001	010	011	100

THE SET OF INTERVALS FORMED FROM LOWER ENDPOINTS

**FIG. 11A**

INTERVALS	(0,0]	(0,3]	(3,8]	(8,30]	(30,35]	(35,50]	[50,MAX)
LABELS	000	001	010	011	100	101	110

THE SET OF INTERVALS FORMED FROM UPPER ENDPOINTS

**FIG. 11B**

A	[10,30]	011	011	011	011
B	[5,35]	010,011	01*	010,011,100	***
C	[0,3]	000	000	000,001	00*
D	[4,8]	001,010	0**	010	010
E	[49,50]	100	100	101	101

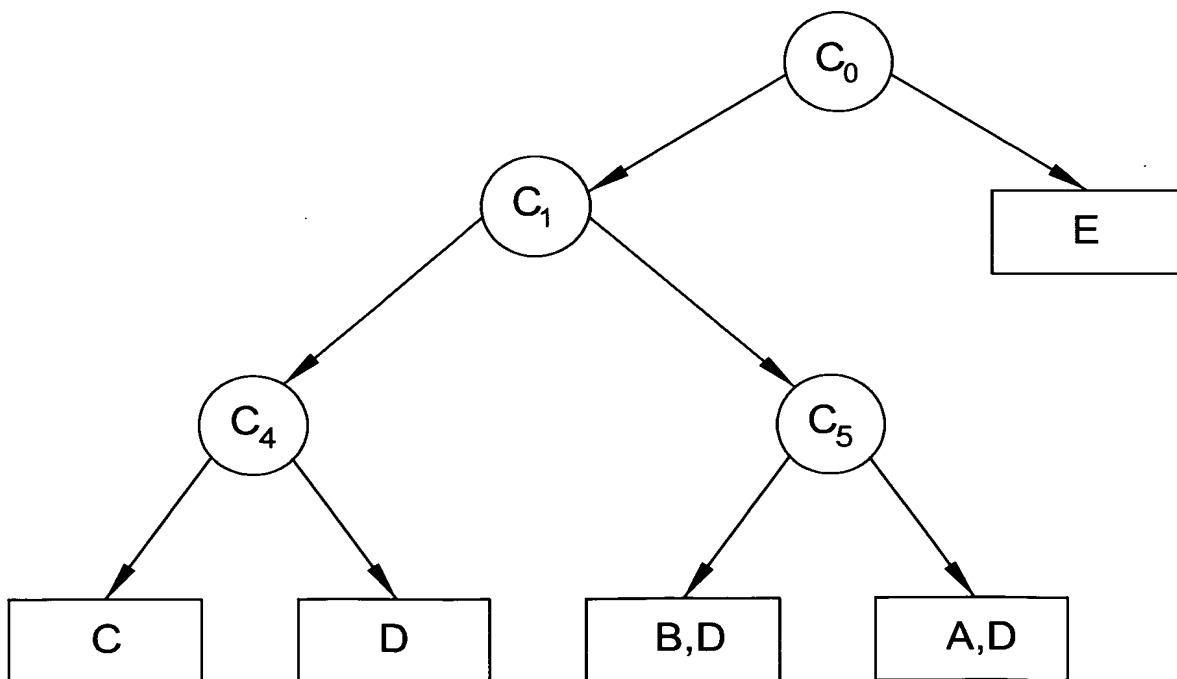
THE STEPS TO FORM THE MATRIX

**FIG. 11C**

REPLACEMENT SHEET  
APPLICATION NO. 10/648,791

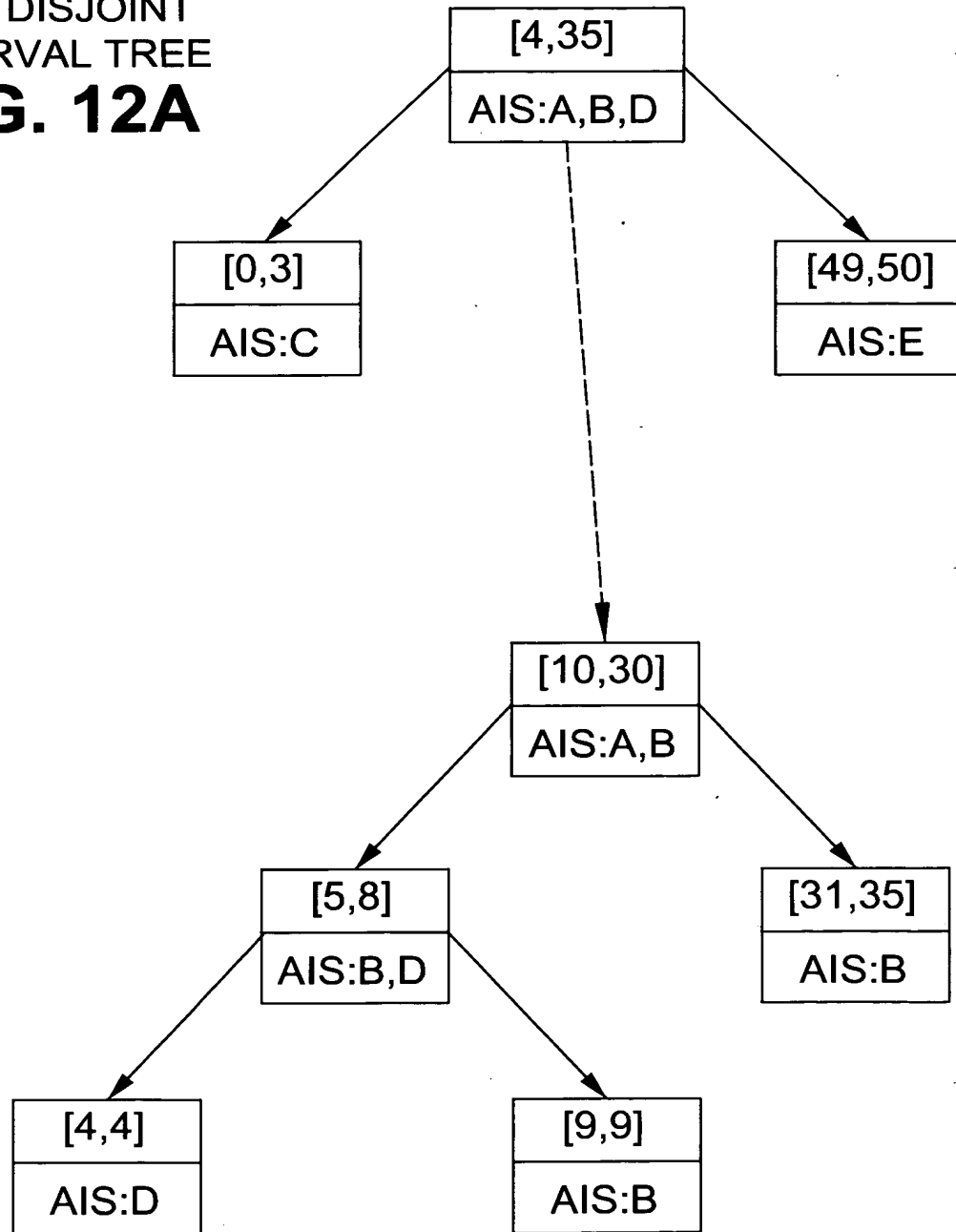
	$C_0$	$C_1$	$C_2$	$C_3$	$C_4$	$C_5$
A	0	1	1	0	1	1
B	0	1	*	*	*	*
C	0	0	0	0	0	*
D	0	*	*	0	1	0
E	1	0	0	1	0	1

THE MATRIX FORMED FOR THE SET OF INTERVALS  
**FIG. 11D**



THE DECISION TREE BUILT FOR S  
**FIG. 11E**

THE DISJOINT  
INTERVAL TREE  
**FIG. 12A**



THE ELEMENTARY INTERVAL TREE BUILT FOR S  
**FIG. 12B**